REMARKS

This Amendment is filed in Response to the Final Office Action dated November 7, 2006. Claims 7, 8 and 14 to 18 are pending in the application. Claims 7, 16 and 18 have been amended. No new matter has been added by these amendments. The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing.

Applicants have corrected the remaining informalities in the Sequence Listing and have submitted herewith the corrected Sequence Listing as a substitute paper copy and in computer readable form. The computer readable form of the Sequence Listing is provided in triplicate. The content of the Sequence Listing is identical to the sequences recited in the Specification and includes no new matter. Therefore, Applicants respectfully submit that the Sequence Listing is in compliance with 37 CFR 1.821-1.825 and that the objection should be withdrawn.

In response to the objection, Applicants have amended Claim 16 in accordance with the recommendation in the Office Action to correct the informality. Applicants respectfully submit that this objection should be withdrawn.

Claims 7, 8 and 14 to 18 have again been rejected under 35 U.S.C. §112, first paragraph, for allegedly not describing claimed subject matter in the Specification sufficient to convey to one of skill in the art that the Applicants possessed the claimed invention. Claims 7, 8 and 14 to 18 have also again been rejected under 35 U.S.C. §112, second paragraph, for allegedly not including an essential step of the method. Applicants respectfully submit that the rejections have been overcome or are improper.

The Specification sets forth and the Office Action acknowledges that it was known at the time of the invention that koji molds produce proteolytic enzymes that can be used to hydrolyze protein-containing materials to form protein hydrolysates. However, as pointed out in the Specification, the expression and secretion of proteolytic enzymes by koji molds is a regulated process affecting the duration and extent of the proteolytic activity of the koji molds.

As further acknowledged in the Office Action, Applicants have sufficiently described isolating the creA gene of koji molds involved in the repression of the synthesis of proteolytic enzymes in the presence of carbon sources and have sufficiently described how to modify that gene to cause the gene product thereof to be essentially nonfunctional. In other words, the gene

product of the modified creA gene is no longer able to perform its function of repressing the synthesis of proteolytic enzymes in koji molds, thereby enhancing the proteolytic activity of koji molds as recited in Claim 7. Furthermore, as, described in the Specification at, for example, page 3, hydrolyzing protein with different microorganisms results in incomplete hydrolysis and longer incubation time required to produce desired hydrolysates. One of skill in the art, however, would recognize that modifying the creA gene of a koji mold causing the gene product thereof to be essentially nonfunctional as described in the Specification would result in the production of protein hydrolysate from hydrolyzing hydrolyzing a proteinaceous material with the koji mold as in Claim 18.

Accordingly, because the Specification sufficiently describes modifying a creA gene of said koji mold such that the gene product thereof is essentially non-functional, Applicants respectfully submit that a skilled artisan would recognize applicants were in possession of a method for enhancing the proteolytic activity of a koji mold and producing protein hydrolysates from hydrolyzing a proteinaceous material with a koji mold. Furthermore, Applicants have included the step of modifying a creA gene of the koji mold such that the gene product thereof is essentially non-functional which is necessary for enhancing the proteolytic activity of a koji mold and producing protein hydrolysates from hydrolyzing a proteinaceous material with a koji mold.

Applicants have canceled Claim 8 without prejudice or disclaimer and have amended Claim 17 to eliminate the reference to functional derivatives of the areA gene. Therefore, Applicants respectfully submit that the rejection of these claims should be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of their patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

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